



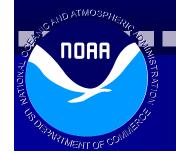
# Your National Weather Service and Emergency Management: A Life Saving Partnership! February 2005 NEMA Conference

Bill Proenza Regional Director National Weather Service Southern Region

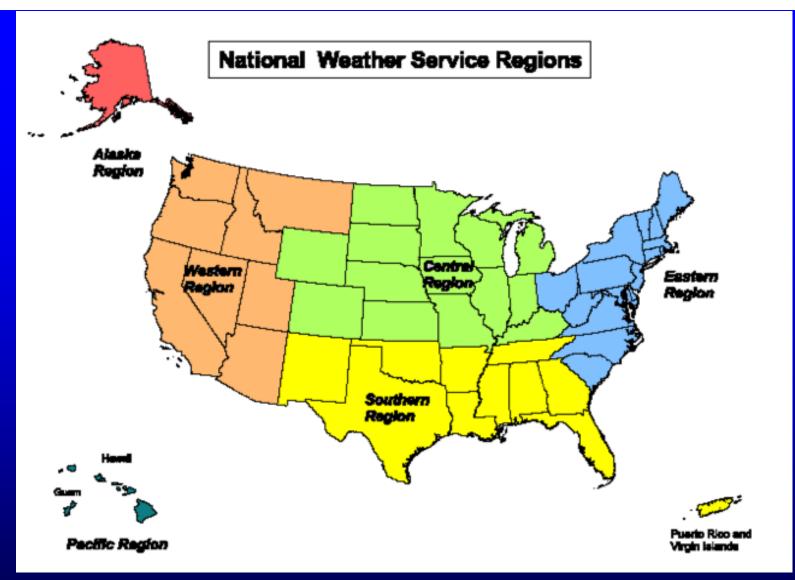
#### Overview

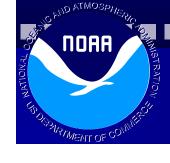
 The NWS and the Nation's Weather & Other Hazards

 The Tidal Wave aka Tsunami; The Forgotten Danger



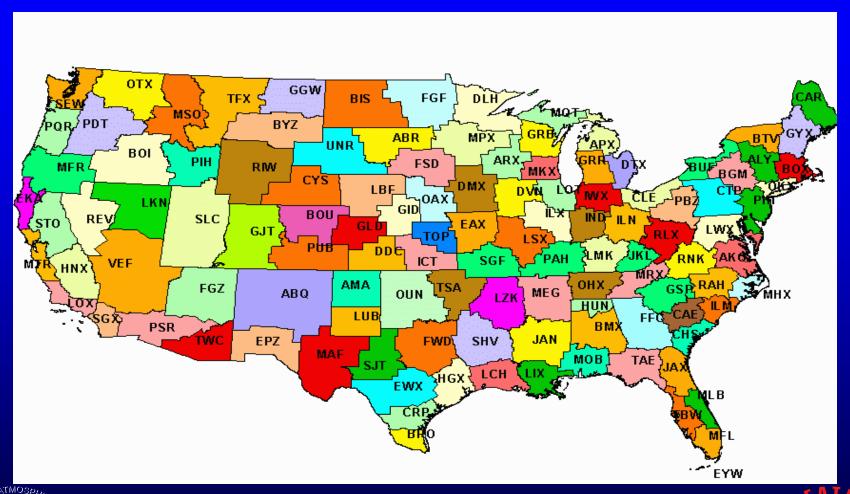








# 122 NWS Warning Forecast Offices









#### **NWS Information Flow**

**Satellite Data** 

Surface Obs. & Buoy Data

**Radar Data** 

NCEP Guidance

**Upper Air Data** 

RFC Guidance

Local

Modeling

**Storm Spotters** 

Co-Op Observers

Local Warning & Forecast Offices & Regional Operations Center

CWSU

**Customer Base** 

Regional Web Farms





#### **Benefits of Your Local WFO**

#### Local Area Expertise For:

- More Accurate Forecasts and Warnings
- Outreach and Partnership with Emergency Management Community
  - Public awareness supports our mission delivery
- Greater Service to Public and Partners
- Better Climate Services
- Homeland Security Weather Support 24/7

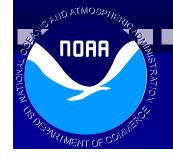




# Regional Operations Center

- Federal/State/Local EM briefings
- NWS office coordination
- Staff deployments to threatened areas
- Supporting Emergency maintenance and equipment needs
- Media briefing & Post-event assessment & reporting



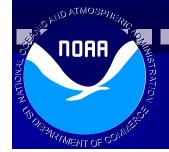




# **Homeland Security**

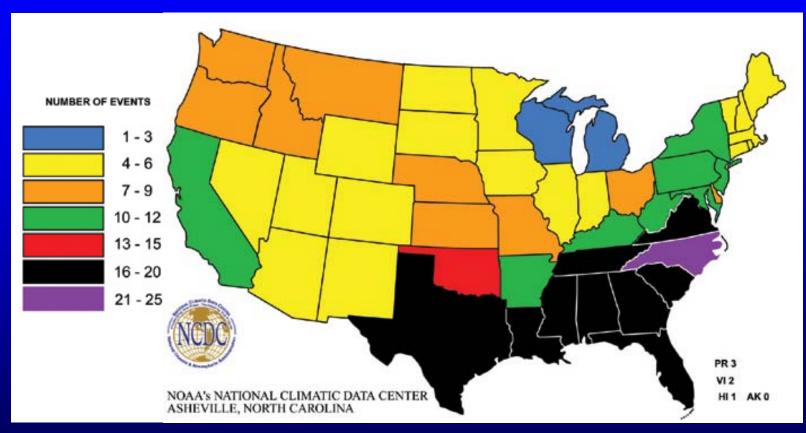
- NWS Local Offices provide key weather to Federal, State and Local agencies.
- High resolution local modeling solutions from WFOs.







#### World's Most Active Weather!



Billion Dollar Weather Events, 1980-2004





#### **U.S.** has the most Tornadoes

SR 3,236

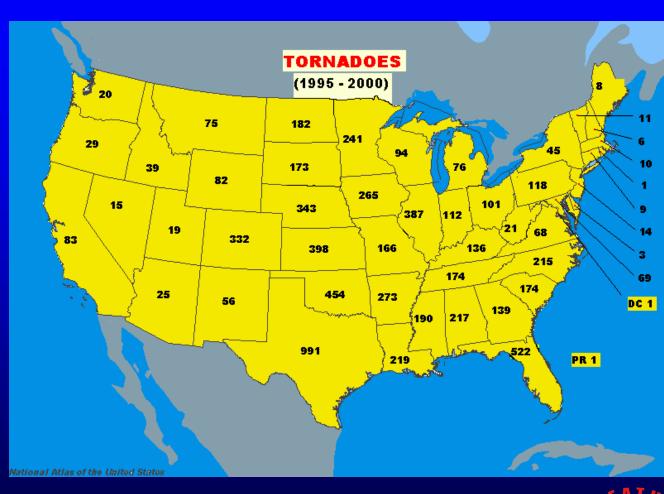
CR 2,987

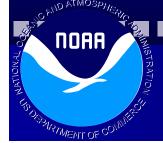
ER 874

WR 305

TOT 7,402

(1995-2000)









#### WFOs & EM Community Save Lives

#### **April 1974 Super Outbreak**

- Single largest 24 hour tornado outbreak
- 148 Tornadoes
- 330 Fatalities
- Up to 5 Minute Lead Time

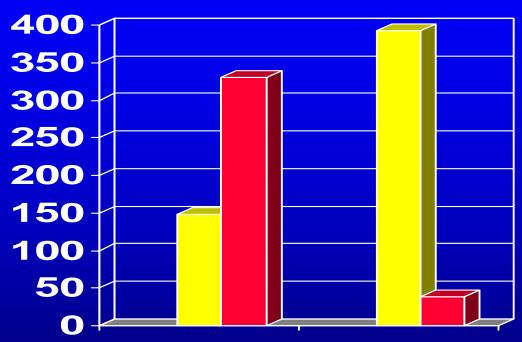
#### May 2003 Outbreak

- Unprecedented in size & time (9 days)
- 340 Tornadoes
- 39 Fatalities
- Averaged <u>19 Minute</u>
   Lead Time





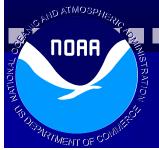
#### **Local WFOs Save Lives**



Tornadoes

**■** Fatalities

1974 2003 May Super Outbreak Outbreak

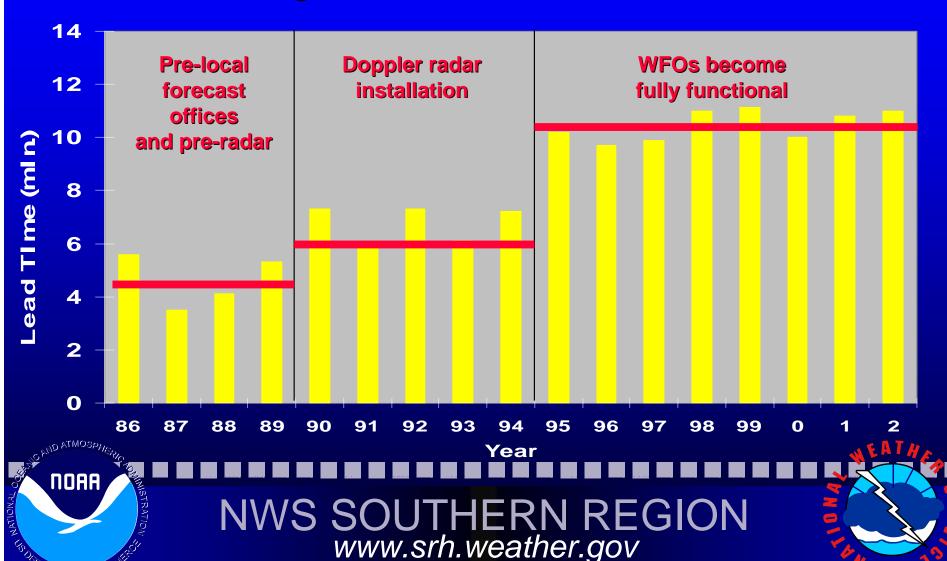




#### **Local WFOs Save Lives**

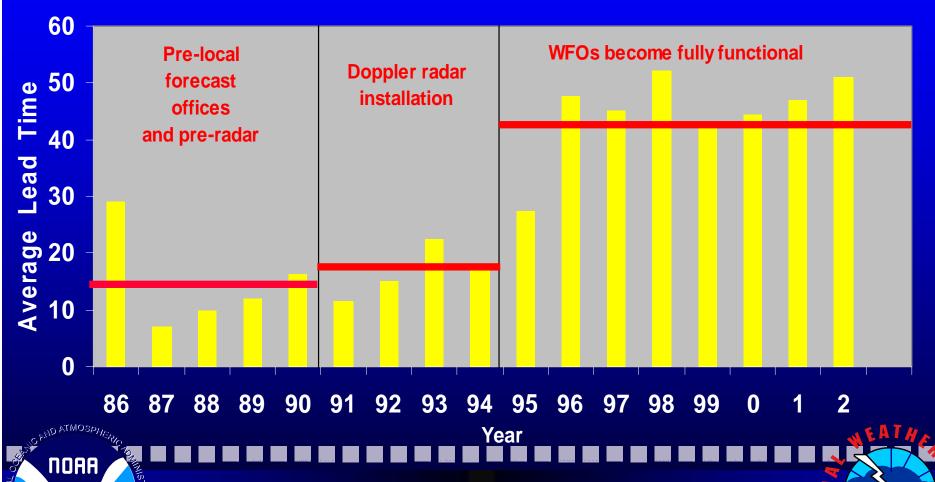
**Tornado Warning Lead Time** 

SAKTIMENT OF CO



#### **Local WFOs Save Lives**

Flash Flood Warning Lead Time





#### Distribution of Tsunamis in the World's Oceans

Location	%

**Atlantic East Coast** 1.6

**Atlantic West Coast** 0.4

Mediterranean 10.1

Caribbean 13.8

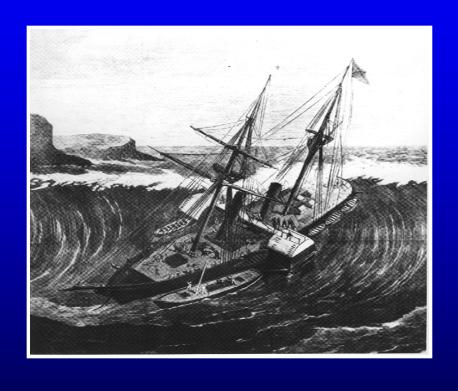
Bay of Bengal 0.8

East Indies 20.3

Oceania 25.4

Japan-Russia 18.6

Pacific East Coast 8.9







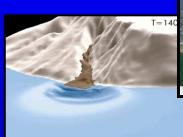
www.srh.weather.gov



### **Atlantic Tsunami-genic Events**

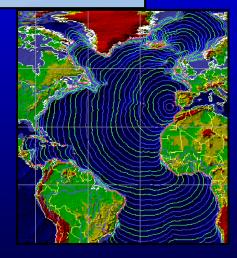
Earthquake

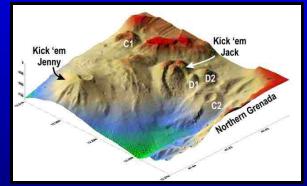
Landslide



SubmarineVolcano

Tele-tsunami









# Western North Atlantic Tsunami Fatalities in last 150 Years

Date	Place	Fatalities
1853	Venezuela	600-4,000 (est.)*
1867	Virgin Islands	23
1882	Panama	75-100
1906	Jamaica	500
1918	Puerto Rico	91-100
1929	Canada	28
1946	Dominican Republic	1,790; 75
1991	Costa Rica	2
		2,584 TOTAL *not included







**Elements of Tsunami Warning System** 

Education

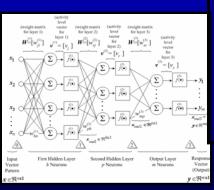
Warning

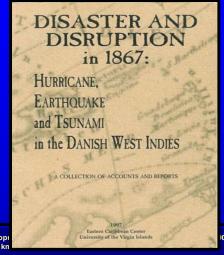
Seismic, Sea Level, Communications

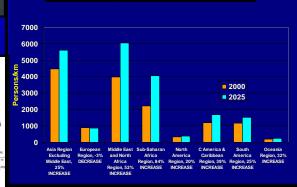
Community Preparedness

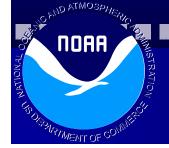
Research











NWS SOUTHERN REGION

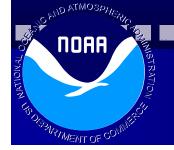
www.srh.weather.gov



#### **NWS SR Internet Site**

# www.srh.weather.gov

- Serves as a one-stop source of weather information.
- Developed with the both partners and general users - in mind.
  - Easy navigation
  - Data given in the manner you need it.
- Increases public awareness and response to valuable NWS 24/7 products and services.

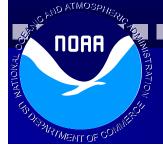




#### **NWS SR Internet Site**

- Forecasts obtained by either postal zip code, city/state search, or by point and click map
- Weather Information in clear, concise format
- Emphasizes local WFO expertise



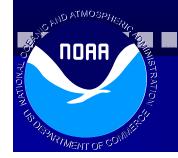




# Radar Images

- Available as a time loop for all Weather Service Radars in the U.S.
- Provides real time storm development, movement, and precipitation information







#### **Local Convective Watches**

- Watch County Notification (WCN)
   Product
  - County Specific Tornado & Severe
     Thunderstorm (convective) Watches from your local experts at the WFO.
  - Updates Expansion and cancellation of Watches by counties from your local WFO.
  - Status Software testing underway.

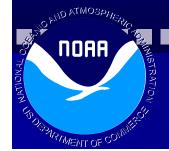




#### Turn Around Don't Drown™

- Flood and Flash Flood Safety Campaign
- Over 30 partners representing local, regional, and national organizations
- Launched in May 2003



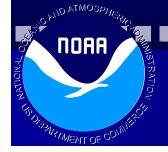


# **StormReady®**

- Grass roots start in Tulsa - 1998
- Expanded nationally in 2000
- 800+ nationwide sites
- Significantly helps improve weather preparedness



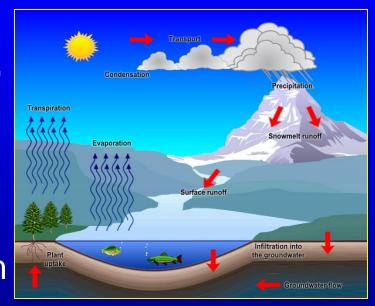




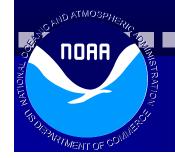


# Project JETSTREAM

- A weather learning tool for EM, aviation and marine communities, teachers, students and general public.
- Includes weather dangers, preparedness & safety tips.
- Includes all areas of weather from thunderstorms to winter storms.



www.srh.weather.gov/jetstream







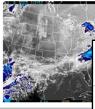
#### **Mobile Weather**

All the weather information you need is now available on mobile devices!



National Weather Service Southern Region

GOES Eastern US IR



National Weather Service Southern Region

Loop Satellite I 01:

Radar: kbmx Birmingham, AL 01:36 PM CST Wed Feb 09 2005



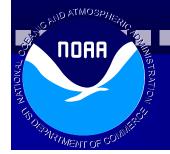
National Weather Service Southern Region

Fort Worth, TX
Current Local Conditions at:
Dallas / Fort Worth International Airport
Last Update: 02/09/05, 12:53 PM CST
Mostly Cloudy: 43 °F

es Radar Image les Storm Totals Wide Page Mode

Forecast at a Glance
Detailed 7-day Forecast
Your Local Radar
Current Conditions
Satellite Image
Hazardous Weather

www.srh.weather.gov/wml



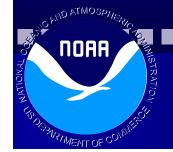


# **Experimental Radar**

- Overlays radar with geospatial elements
- Ingests into GIS applications



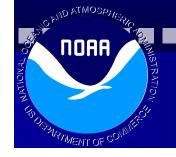
www.srh.weather.gov/ridge



#### The Future of the NWS

"Forecast improvement will be through mesoscale (local scale) decision making, and sensible weather elements"

- Most NWS users want to know weather and climate information.
- With use of local models and expertise, we will be able to meet increasing public and private partner needs for accuracy

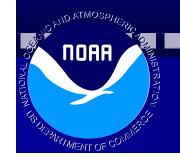




"...government closest to the people, governs best."

- President George W. Bush

As epitomized by the NWS:
...government closest to the people,
serves best!





# Questions? Bill.Proenza@noaa.gov (817) 978-1000

Would you like copies of the slides?

Go To: www.srh.weather.gov

At Left Margin Click on: Welcome from the Director

At Left Margin Click on: "Feb. 2005 NEMA Conference"

